

# METHOD OF AND SYSTEM FOR MANAGING PROMOTIONS FOR PURCHASE TRANSACTIONS OVER A NETWORK

## FIELD OF THE INVENTION

This invention relates to a method of and system for managing promotions for purchase transactions over a network and more particularly to a method and system that enables a manufacturer or retailer to monitor the status of and track the redemption of promotions for items offered for sale at online retail outlets.

## BACKGROUND OF THE INVENTION

In order to increase the number of new customers who buy a particular product, many retail outlets, and grocery stores in particular, set up a database of certain items that it sells and links each of these primary items to a secondary item that is different from the item to which it is linked for the purpose of promoting the secondary item. As a customer is checking out and each item is scanned at the checkout, the items are monitored and simultaneously compared to the items in the database to determine whether any of the items are associated with a secondary item. If an item is associated with a secondary item, a coupon for the secondary item is printed out for the customer to use at a later date.

This system enables the store to provide to a customer, who may not normally purchase the secondary item, an incentive for purchasing the secondary item, simply because the customer purchased the particular item that was linked to the secondary item. The system thus potentially creates a new customer for the secondary item.

While this system is in use in the so-called "brick and mortar" outlets, there is no such system that enables an online retail store to provide coupons to customers for items in this manner. Furthermore, in the above-described system, the promotions are available only within each store or store chain where the promotion has been set up. A promotion cannot be set up by a manufacturer or wholesaler for an item at a central location that is available to a large number of retail outlets for access to the promotions and for redemption of the coupons. There is also no means for managing the coupons online and for monitoring the success of the coupons.

Accordingly, it is an object of this invention to provide a method of and system for managing promotions for items offered for sale at online retail outlets, wherein a manufacturer or retailer has access to its promotions to authorize the promotions, obtain an accounting for the promotions and to obtain a report of the success of the promotions.

## SUMMARY OF THE INVENTION

The invention is directed to a method of and system for managing promotions for items offered for sale at online retail outlets. The method and system enable a manufacturer or retailer to access statistics of its promotions, including the number of promotions issued and redeemed. The method and system also enables the manufacturer or retailer to authorize or decline a promotion that has been created and to obtain accounting reports that provide information about the dollar value of the promotions that have been redeemed.

A system for managing promotions over a network according to one embodiment of the invention includes a promotion server system having a computer processor and associated datastore, the datastore containing data representative of terms and statistics of one or more item promotions and a commercial server system including a computer processor, the commercial server system being selectively coupleable to the promotion server system over the network. The promotion server system includes promotion code for transferring, to the commercial server system, the data representative of the terms and statistics of the promotions. The promotion server system may further include authorization code for enabling the commercial server system to accept or decline one or more of the promotions and/or accounting code for providing to the commercial server system data representative of one or more of the number of promotions redeemed and the value of the redeemed promotions. Certain of the promotion data in the datastore of said promotion server system may be associated with a specific commercial server system and the specific commercial server system can only access the certain of the promotion data associated therewith. The authorization code may include screen display data having a promotion search portion for enabling the commercial server system to search for its promotions based on search terms input to the promotion search portion by the commercial server system. The promotion code may include screen display data having

a promotion search portion for enabling the commercial server system to search for its promotions based on search terms input to the promotion search portion by the commercial server system. The accounting code may include screen display data having a promotion search portion for enabling the commercial server system to search for its promotions based on search terms input to the promotion search portion by the commercial server system. The accounting code screen display data may include a table having at least one of the total number of promotions redeemed and the total value of the redeemed promotions. The accounting code screen display data table may include at least one of the total number of promotions redeemed and the total value of the redeemed promotions for each of a number of days that the promotions are active. The promotion data may be transferred to the commercial server system in the form of screen display data.

According to another embodiment of the invention, a method of managing promotions over a network includes the steps of establishing a connection between a commercial server system and a promotion server system over the network and the promotion server system transferring promotion data to the commercial server system over the network, the promotion data including terms of the promotions and statistics of a performance of the promotions. The promotion data may be transferred to the commercial server system in the form of screen display data. The method may further include the step of the commercial server system selecting a promotion management option, wherein the promotion server system transfers screen display data to the commercial server system that provides the commercial server system with an option to view the statistics and the step of the commercial server system selecting a promotion management option, wherein the promotion server system transfers screen display data to the commercial server system that provides the commercial server system with an option of pulling one or more of the promotions from an active status. The method may further include the step of the commercial server system selecting a promotion authorization option, wherein the promotion server system transfers screen display data to the commercial server system that provides the commercial server system with an option of accepting a promotion and the step of the commercial server system selecting a promotion authorization option, wherein the promotion server system transfers screen

display data to the commercial server system that provides the commercial server system with an option of declining a promotion. The method may further include the step of the commercial server system selecting a promotion accounting report option, wherein the promotion server system transfers screen display data to the commercial server system that provides the commercial server system with statistics that include the dollar value of the promotions redeemed by a client system through the commercial server system and the step of the commercial server system selecting a promotion success report option, wherein the promotion server system transfers screen display data to the commercial server system that provides the commercial server system with statistics that include a redemption rate of the promotions redeemed by a client system through the commercial server system.

According to another embodiment of the invention, a system for managing promotions over a network includes a promotion server system and associated data store containing data representative of one or more item promotions, a commercial server system selectively coupleable to the promotion server system over the network and at least one client system selectively coupleable to the commercial server system over the network. The promotion server system includes available promotion code for providing, to the commercial server system, data representative of the identity and terms of one or more of the item promotions and promotion distribution code, responsive to requests from the commercial server system for specific ones of the item promotions, for transmitting the promotion data for the specific item promotions to the commercial server system. The commercial server system is responsive to access thereto by one of the client systems, and includes pointer code that points the client system to the promotion data representative of terms of the promotions in the datastore, to transfer the promotion term data to the client system. The item promotion data in the data store may be associated with a specific commercial server system and the available promotion code may transmit to the specific commercial server system only item promotion data associated with the specific commercial server system. The promotion server system may maintain data representative of the identity of the commercial server system and the identity of item promotion data requested by the commercial server system. The commercial server system and the client systems may include code which enables

transactions over the network and the commercial server system may include code for transmitting, to the promotion server system, transaction data representative of transactions between the commercial server system and the client systems which involve the item promotions. The promotion server system may maintain data representative of the transaction data. The promotion server system and the commercial server system may include code enabling the commercial server system to request information relating to the transaction data and, in response thereto, to adjust the terms of the promotions.

## BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing and other objects of this invention, the various features thereof, as well as the invention itself may be more fully understood from the following description when read together with the accompanying drawings in which:

FIG. 1 is a diagrammatic view of a system for defining promotions in accordance with the present invention;

FIG. 2 is a flow diagram of a method of defining promotions in accordance with the present invention; and

FIGS. 3-11 are diagrams of the screen displays for each of the steps involved in the method in accordance with the present invention.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention is directed to a method of and system for managing promotions for items offered for sale on a communication network such as the internet. A promotion server system includes screen display code that enables a commercial server system to select from a number of options for reviewing the performance of the promotions set up on the promotion server system by the manufacturer or retailer. One of the options includes a screen display that enables the commercial server system to review a listing of all of its promotions and the status of each promotion. Another option includes a screen display that enables the commercial server system to review a listing of its promotions and to accept or authorize each promotion or to decline or cancel each promotion. Another option includes a screen display that provides reports about each

promotion, including an accounting report and a success report. An overview option includes a programmable screen display that provides a ranking of the performance of each of a manufacturer's or retailer's promotions relative to each other. In order for the promotion server system to obtain the information necessary to compile the accounting and success reports, as well as the overview page, the commercial server system reports this information to the promotion server system. The commercial server system can either report this information to the promotion server system, or the commercial server system can use the promotion server system to process the redemption of the promotions, as described in commonly assigned U.S. Patent No. 6,041,309, entitled METHOD OF AND SYSTEM FOR DISTRIBUTING AND REDEEMING ELECTRONIC COUPONS and commonly assigned copending patent application Serial No. \_\_\_\_\_, entitled METHOD OF AND SYSTEM FOR DISTRIBUTING AND REDEEMING ELECTRONIC COUPONS, both incorporated herein by reference. By using the promotion server system for processing the redemption of the promotions, the promotion server system has the information necessary for compiling the reports.

FIG. 1 shows a diagram of a system 100 for managing promotions in accordance with a preferred embodiment of the present invention. The system 100 includes commercial server system 120 and promotion server system 130 connected to a common communications network 160. A client system 150 may also be connected to the communications network 160. Preferably, the commercial server system 120, promotion server system 130 and client system 150 can each be a personal computer such as an IBM PC or IBM PC compatible system or an APPLE® MacINTOSH® system or a more advanced computer system such as an Alpha-based computer system available from Compaq Computer Corporation or a SPARC® Station computer system available from SUN Microsystems Corporation, although a main frame computer system can also be used. Preferably, the communications network 160 is a TCP/IP-based network such as the Internet or an intranet, although almost any well known LAN, WAN or VPN technology can be used.

In one preferred embodiment of the invention, the client system 150 is an IBM PC compatible system operating an operating system such as the Microsoft Windows® operating system, and commercial server system 120 and promotional server system 130



coupon book and data representative of a serial number or identification number for the electronic coupon book.

In one preferred embodiment, the electronic coupon contains all the information necessary to redeem the coupon. Specifically, the electronic coupon identifies the grantor (i.e., the party or vendor that will redeem the electronic coupon), the nature of the discount or benefit provided and a unique serial number or other data structure that permits the electronic coupon to be authenticated or validated. Thus, a server redeeming this type of electronic coupon can obtain all the information necessary to redeem from the electronic coupon. The server can even include the software necessary to authenticate or validate the electronic coupon.

In an alternative embodiment, an electronic coupon book includes a unique serial number or identification number and data structure useful for authenticating or validating the electronic coupon book. The actual content of the electronic coupon book can be determined for example, by visiting a website which reads the coupon book serial number and provides the user with listings of the coupons available. A benefit to this configuration is the organization that issues the electronic coupon book can add vendors even after the electronic coupon book has been issued. Thus, if a vendor signs up with the organization that issues electronic coupon books after a particular coupon book has been issued to a client, the vendor can be added to the electronic coupon book at a later date. In order to redeem this type of electronic coupon, the server that intends to redeem the electronic coupon must connect to an authentication server which will authenticate or validate the coupon book and indicate the nature of the benefit of the electronic coupon to the server requesting authentication/validation. Another benefit of this configuration is that the coupons are relatively tamper-proof due to the authentication and validation facilities. In many prior art systems, coupons could be copied and/or altered by the user with relative ease; in the absence of validation/authentication schemes, few reliable methods for detection of such counterfeits exist.

FIG. 2 shows a flow diagram 200 of a method of managing promotions in accordance with one preferred embodiment of the invention. In a primary step 202, the commercial server system 120, FIG. 1, establishes a connection with the promotion server system 130 over communications network 160. The commercial server system



then initiates promotion management by logging on to the website hosted by the promotion server system, step 204. By logging on to the website with a username and password that is specific to that commercial server system, the user of the commercial server system gains access to its account which includes the promotions that have previously been created by the commercial server system. When logged on, the promotion server system generates screen display data that shows a promotion overview page, step 206. The promotion overview page is customizable by the commercial server system and can provide a ranking of the commercial server system's promotions, relative to each other.

In the preferred embodiment, from the promotion overview page, the user of the commercial server system has three options. First, the promotion management option may be selected, step 208. When this option is selected, the promotion server system generates screen display data that shows a listing of the commercial server system's active promotions. From this screen, the user of the commercial server system can choose to view the statistics of each promotion, step 210, or to pull the promotion from active status, step 212.

Second, the promotion authorization option may be selected, step 214. When this option is selected, the promotion server system generates screen display data that shows a listing of the commercial server system's promotions that have been defined by the commercial server system. Preferably, the promotions are created using the invention described in applicant's commonly assigned copending patent application Serial No. \_\_\_\_\_, entitled METHOD OF AND SYSTEM FOR DEFINING A PROMOTION FOR A PURCHASE TRANSACTION OVER A NETWORK, incorporated herein by reference. For each promotion, the listing includes a promotion identification number, the title of the promotion, the website hosted by the commercial server system and the commencement and expiration dates of the promotion. The user of the commercial server system can then accept or authorize the promotion, step 216, or decline the promotion, step 218.

When the promotion accounting report option is selected, step 220, the promotion server system generates screen display data that shows the number of electronic coupons redeemed for each promotion and the total dollar amount of the promotion. From the

accounting report, the user may view a promotion success report, step 222. When the promotion success report is selected, the promotion server system generates screen display data that shows how successful each promotion has been, as dictated by the total number of electronic coupons redeemed or by a ratio of the number of electronic coupons redeemed to the total number of electronic coupons issued.

An example of the management of promotions will now be described with reference to FIGS. 3-11, which are screen displays generated by the promotion server system. FIG. 3 shows the promotion overview page 230 that is accessed in step 206, FIG. 2. When the user logs on to the promotion server using its specific username and password, the user is allowed to access only its own account which includes its promotions. Promotion overview page 230 includes promotion ranking portion 232 which includes several categories in which the promotions are ranked. Each of the promotions are identified by a promotion identification number and a title. The promotions may be ranked in a top promotion category 234 and a least productive category 236, wherein the promotions are ranked based on the redemption ratio of the promotions; and a top promotion category 238 and a least productive category 240, wherein the promotions are ranked based on the number of redeemed promotions. Promotion ranking portion 232 may be customized by the user to include any number of these categories and also may include graphs of the promotion redemptions. Promotion overview page 230 also includes a summary portion 242 which shows the total number of active promotions, the number of promotions starting in the current month and the number of promotions ending in the current month. Links portion 244 includes links to the management, authorization and report options of the invention.

When the user "clicks on" the "Manage Promotions" link 246, step 208, the promotion server system generates the promotion management screen display 252, FIG. 4. Promotion management screen display 252 includes a promotion search portion 254 which enables the user to search for its promotions based on the creation date, box 256, which allows the user to search all dates, specific dates, or ranges of dates. The user can also search based on the status of the promotion, box 258, whether the promotion is active, inactive, in production or disabled. The format of the promotions is selected in box 260, which allows the user to select to view only the text of the promotion or the

graphics of the electronic coupon associated with the promotion. The title or promotion identification number of the promotion may also be searched using key word search portion 262. As shown in FIG. 4, three promotions have been found as a result of a search for all of the promotions of the commercial server system "Demo Site," as indicated by website identifier portion 264. Promotion table 266 includes each of the promotions found in the search. Each of the promotions listed in table 266 are identified by the promotion identification number and title of the promotion, as well as the start and expiration dates and status of the promotion. Under the "Action" heading, the user has the option of either viewing the statistics of the promotion or pulling the promotion from active status.

By clicking on the "Stats" link 268 for a particular promotion, the user gains access to promotion statistics page 272, FIG. 5, to view the statistics for the promotion, step 210. Promotion statistics page 272 includes information about the number of promotions issued, viewed, "clicked," and redeemed, as well as the total money spent to take advantage of the promotion and the amount of money saved by the consumers of the promotional product as a result of redeeming the electronic coupon associated with the promotion. Promotion statistics page 272 also includes a graph portion 274 that shows a graphical representation of the promotion statistics. The user can select the promotion for which a graph is generated in box 276, as well as the date range of the graph in box 278. The type of graph is selected in portion 280 and the data included in the graph is selected in portion 282.

By clicking on the "Pull" link 270, FIG. 4, for a particular promotion, the user gains access to promotion page 284, FIG. 6. Promotion page 284 includes information that identifies the particular promotion, and a "Pull" button 286 which, when clicked, removes the promotion from active status, step 212, FIG. 2.

By clicking on the "Authorize Promotions" link 248, FIG. 3, the promotion authorization option is selected, step 214, FIG. 2. The promotion server system then generates the promotion authorization screen display 290, FIG. 7. Promotion authorization screen display 290 includes a promotion search portion 292, similar to the promotion search portion 254 of the management screen display 252, which enables the user to search for its newly created promotions which have not yet been authorized. The

promotion search may be based on the creation date, start date and expiration date of the promotion. The user can also search based on the status of the promotion. The title or promotion identification number of the promotion may also be searched using key word search portion 294. As shown in FIG. 7, three promotions have been found as a result of a search for all of the promotions of the commercial server system "Demo Site," as indicated by website identifier portion 296. Promotion table 298 includes each of the promotions found in the search. Each of the promotions listed in table 298 are identified by the promotion identification number and title of the promotion, as well as the start and expiration dates and status of the promotion. Under the "Action" heading, the user has the option of either accepting or authorizing the promotion or declining the promotion.

By clicking on the "Accept" link 300, the user gains access to accept promotion page 304, FIG. 8. Accept promotion page 304 includes information that identifies the particular promotion, and an "Accept" button 306 which, when clicked, accepts the promotion into active status, step 216, FIG. 2. By clicking on the "Decline" link 302, FIG. 7, the user gains access to decline promotion page 308, FIG. 9. Decline promotion page 308 also includes information that identifies the particular promotion, and a "Decline" button 310 which, when clicked, declines the promotion from active status, step 218, FIG. 2.

By clicking on the "Accounting Report" link 250, FIG. 3, the promotion accounting report option is selected, step 220, FIG. 2. The promotion server system then generates the promotion accounting report screen display 312, FIG. 10A. Promotion accounting report screen display 312 includes date range input portion 314 for selecting the date range of the desired accounting data for a particular promotion and report type selection box 316 for selecting the format of the accounting report. In FIG. 10A, the "Total Results Only" format is selected, resulting in a data display portion 318a that shows the total number of promotions redeemed and the total value of the redeemed promotions. Alternatively, the selection of the "Results by Day" format in report type selection box 316 results in a data display portion 318b, FIG. 10B, that shows the number of promotions redeemed and the total value of the redeemed promotions for each day that the promotion is active or for each day selected in date range input portion 314.

From promotion accounting report screen display 312, by clicking on the "Success" link 320, FIGS 10A and 10B, the promotion success report option is selected, step 222, FIG. 2. When this option is selected, the promotion server system generates the promotion success screen display 322, FIG. 11. Promotion success screen display 322 includes a promotion search portion 324, similar to the promotion search portion 254 of the management screen display 252, which enables the user to search for its promotions. The promotion search may be based on a start date range and expiration date range of the promotion. The user can also search based on the status of the promotion. The title or promotion identification number of the promotion may also be searched using key word search portion 326 and the format of the success report is selected in success measure selection box 328. As shown in Figure 11, the "Redeemed/Issued" success measure is selected in box 328, resulting in a data portion 330 that lists each promotion found in the search and the success of each promotion as a ratio of the number promotions redeemed to the total number of promotions issued. Alternatively, data portion 330 could include only the total number of promotions redeemed.

Accordingly, the present invention enables a commercial server system to manage its promotions by providing a system that allows the commercial server system to accept or decline pending promotions, to view redemption and accounting statistics of the promotions and, based on these statistics, to pull promotions from active status. This allows the commercial server system to monitor its promotions and to change the promotions in real time based on the performance of the promotions.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The present embodiments are therefore to be considered in respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of the equivalency of the claims are therefore intended to be embraced therein.